3.2 Exam Review – Not for submission, only a study guide

1. Compare & Contrast the number of cells produced in mitosis vs. meiosis.
2. Compare & Contrast the type of cells produced in mitosis vs. meiosis.
3. Compare & Contrast the processes & products of mitosis vs. meiosis.
4. Describe the parts of cell division requiring energy.
5. Contrast prokaryote & eukaryote cell division. Describe the pros & cons of each.
6. Describe how Cyclin, MPF, CDK & DNA concentrations change during the cell cycle.
7. Contrast the mechanism of cytokinesis & plants & animals.
8. For an organism with n=3, draw out their cells in each phase of Interphase/mitosis & Interphase/meiosis, describing the events of each phase.
9. Differentiate between inheritance patterns on a pedigree.
10. Calculate probabilities of events using probability rules.
11. Describe mechanisms that account for unexpected genetic outcomes.
12. Differentiate between X-linked recessive outcomes & autosomal recessive outcomes.
13. Differentiate between autosomal recessive outcomes & autosomal dominant outcomes.
14. Differentiate between codominance outcomes & incomplete dominance outcomes.
15. Differentiate between epistasis outcomes & multiple alleles outcomes.
16. Differentiate between linked gene outcomes & unlinked gene outcomes; write & test a null hypothesis using Chi Square.
17. Determine a gene map based on given recombination frequencies.
18. Calculate distances between linked genes using offspring results.